THE EFFECTS OF IN-SERVICE TRAINING ON STAFF TOKEN SYSTEM USAGE

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An abstract of a thesis by
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The problem. To assess the usefullness of a concentrated in-service training packet for staff. Focus was on the quality of token presentation and social interaction with residents of a residential psychiatric facility.

Procedures. A one hour in-service was presented using a multiple baseline design across eight nurses from two different shifts. The in-service presented training to help increase nurse's token presentation and appropriate social interaction with residents. Observations were conducted during medication times at one of two nurses stations each targeted shift.

Findings. Appropriate social interaction and token presentation from nurse to resident during medication presentation increased significantly for each nurse. Large increases across shifts were obtained also, having the A.M. shift increase from 1% to 84% appropriate social interactions and 40% to 99% correct token presentations, while the P.M. shift went from 2% to 78% and 39% to 99% respectively.

Conclusions. In-service training focussed on specific behavior change increased token presentations and appropriate social interactions in a given setting. A one week follow-up showed maintenance of the behavior change data obtained in the study.

Recommendations. Development of a facility wide staff training packet to help increase overall token usage and appropriate social interactions. Assessment of the reciprocal results could then be made.

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CHAPTER I

INTRODUCTION

The possible overall effectiveness of a token economy system versus a standard psychiatric treatment program on ward environments is well documented (Atthowe & Krasner, 1968; Gershone, Errickson, Mitchell, & Paulson, 1977; Shean & Zeidberg, 1971). By 1972 McReynolds and Coleman had considered token economies the "treatment of choice" for chronic schizophrenic patients, and token assessment went from small ward size to wards with 60 or more patients on them (Aitchison & Green, 1974). A number of factors were found to be important in the success of each token economy across ward size, but a similar factor in several studies was the staff's role in patient behavior change (Hall, Baker, & Hutchinson, 1977; McReynolds & Coleman, 1972; Milby, Pendergrass, & Clarke,1975). Besides providing for direct on hands care of the residents, they can also provide modeling features for appropriate behavior and be a possible important social interaction system (Bernstein, 1982; Milby et al., 1975). Unfortunately, surveys have shown social interaction between residents and staff to account for only about five percent or less of the resident's time (Daily, Allen, Chinsky, & Viet, 1974).

Staff management programs have been the subject of considerable research, ranging across several intervention/training styles and settings. For any such program to work it is important

for appropriate staff behavior to be developed and maintained (Hall & Baker, 1973; Kazdin, 1973). The wealth of studies addressing these issues provide a wide menu of choices for training, leaving an experimenter or programmer to find those best suited to their particular environment. Several specific reinforcers have been used to alter ward staff performance, including money rewards (Katz, Johnson, & Gelfand, 1972; Pommer & Streedback, 1974), trading stamps (Hollander & Plutchik, 1972), rankings with cash reward (Pomerleau, Bobrove, & Smith, 1973), and time off from work (Watson, 1972). Although these reinforcers had produced positive results there were several complications with economic feasibility, scheduling, legal requirements and administrative hesitancy (Iwata, Bailey, Brown, Foshee, & Alpern, 1976; Montegar, Reid, Madsen, & Ewell, 1977). Additional reinforcement systems focussed on a performance based lottery (Iwata et al., 1976), written or graphic feedback to staff (Fielding, Errickson, & Bettin, 1971; Quilitch, 1975), self-recording and supervision (Burg, Reid, & Lattimore, 1979), and in-service style training and supervisor approval (Adams, Tallon, & Rimell, 1980; Montegar et al., 1977).

There are various types of institutions, providing for numerous types of staff and all with their own unique as well as common problems on the ward. One such setting is that of a residential care facility. Many times the staff of such a facility is comprised of attendant level staff, paraprofessionals, nursing personnel, and overseen by a psychologist (Bernstein, 1982;

Gripp & Magaro, 1974). Several of these levels of staff members may be only minimally trained or even untrained in behavioral techniques they might be required to apply on the ward, especially if utilizing a token economy system. Time efficient and cost effective staff training programs are then essential to the success of every behavioral based ward (Hall & Baker, 1973; Kazdin, 1973). Two commonly used training and maintenance procedures which adjust well to untrained staff personnel are in-service training and supervisor feedback. Staff behavior has been successfully changed through the use of in-service training (Gardner, 1972; Panyan & Petterson, 1974), but appears to generalize poorly to the ward in various situations (Katz et al., 1972; Panyan, Boozer, & Morris, 1970; Quilitch, 1975). By adding such techniques as modeling and role-playing Adams et al. (1980) increased the generalization of such training to the ward. Supervisor feedback and praise was also applied to staff behavior, resulting in increases in target behaviors (Montegar et al., 1977; Panyan et al., 1970; Quilitch, 1975), even when provided on a weekly or monthly basis (Ford, 1980). Montegar et al. (1977) also received an increase of 25 to 50% in staff-resident interactions over baseline with the use of in-service training and supervisor approval. Although direct supervisor feedback is an inexpensive technique when available it is not always designed into job descriptions, and can often be of a non-direct nature which can help to eliminate its effectiveness. In-service training

has a major advantage of being in most instances a normal routine program base for most institutions mandated by federal law (Morales v. Turman, 1974).

The present study investigated the effectiveness of an in-service training program developed to help increase proper token usage and staff-resident interactions in a residential token economy. Professional nursing personnel, whom themselves were supervisors of other psychiatric staff in the facility, were the subjects of the study. Specifically, the dissemination of medication to residents on a daily regimen by the nurses was observed, focussing on token presentation techniques and levels of staff-resident social interactions.

CHAPTER II

METHOD

Participants and Setting

Participants in this study were eight members of the direct care nursing staff from a county psychiatric intermediate care facility. Observations were made on the work shifts of 7:00 A.M. - 3:30 P.M. (7-3) and 3:00 P.M. - 11:30 P.M. (3-11). A staff breakdown by shift and sex provided for three female nurses and one male nurse on the 7-3 shift and four female nurses on the 3-11 shift. There were a total of seven full time nurses and one part time nurse observed. Ages for the nursing staff ranged from 22 to 40 years, with educational levels from 14 to 18 years. Length of employment at the facility ranged for nurses from 6 months to $3\frac{1}{2}$ years.

Residing in the facility at the time of this study were approximately 36 male and 40 female residents, 10 of whom were considered as geriatric and requiring more one-to-one care due to special limitations. The amount and composition of the resident make up varied during the study but remained similar. A very wide range of psychiatric problems could be found among the residents, but all were determined to have some form of behavioral problems requiring long term residential care. The age range of the residents was from 20 to 82 years.

The facility utilized a token economy in providing care to the residents housed there (10 of the geriatric residents

were not on the token system due to their specific limitations). The token economy provided a framework for improving and maintaining the behavior of the residents, and it provided a data system which supported all programming efforts.

Token cards formed the basis of the program, making use of three levels of color-coded cards; Activity of Daily Living (ADL) card, Social Skills card, and a Salaried token card (see appendices A, B, and C respectively). The lowest or first level was the tan Activity of Daily Living (ADL) token card (appendix A) which focused on basic skills like hygiene, dressing, and personal management. Second was the green Social Skills token card (appendix B) which emphasized such skills as making appropriate requests and greetings, dealing with aversive situations and demonstrating appropriate social skills during activities. A yellow Salaried token card (appendix C) was the last level and provided for the resident capable of functioning independently and appropriately with minimum supervision (Broadlawns West). At the start of the study there were 46 residents on the ADL card, 21 on Social Skills, and only three on the Salaried card. Throughout the study the amount of residents on each token card varied from time to time.

A large percent of the staff work time was spent in handling these token cards, charting, and socially interacting among themselves and with the residents. Once the resident had earned enough points from these interactions or work assignments they were able to trade them in on services or

goods such as buying beverages, purchasing phone calls, visiting a ward token store, or even going to a local convenience store with staff. For the nurses a major time for possible social interaction with each resident and or each resident to receive points from them was at their medication time.

By observing the staff at such specific times it is possible to measure the consistency and appropriateness by which the token system is used, as well as measuring the level of social interaction at that time and any resulted effects on token usage and resident behavior that it might have.

Behavioral Definitions

Staff social interaction. Nurse's behavior was observed and measured based on a number of levels of social interaction when dealing with residents in the target situation (medication time) and appropriate/inappropriate presentation of token points. Several levels of social interaction were partially adopted from previously used material from Iwata et al. (1976), Montegar et al. (1977), and Burg et al. (1979), with token presentation defined in the Broadlawns West ICF Token Economy Instruction Manual.

1. Direct interaction with resident: The staff member speaks with the target resident about the target task in more depth than saying "Here is your medication". This includes verbal interaction on token presentation or fining, and also other non-task topics if the previous part of the definition is met.

2. Indirect interaction with resident: The staff member completes target task without verbal interaction with target resident about task, which includes presenting token points without verbal confirmation of why (or fined if in their individual management plans) or limiting remarks to "Here is your medication". This also includes non-task discussions when number one above is not met during a target interaction.

3. Interaction with other residents: The staff member is maintaining physical contact or talking to a non-target resident during a specific time they should be interacting with a target resident (e.g., when giving target resident medication).

4. Staff to staff: The staff member is interacting with another staff member and not a target resident (e.g., talking between two or more staff members) during a target interaction with a resident.

Resident behavior. Residents were observed according to three categories of behavior.

1. Disruptive: The resident is engaged in self-injurious behavior (e.g., hitting or biting self), clothes ripping, fighting with peers or staff, hitting others, kicking, throwing furniture or equipment.

2. Self-stimulatory: The resident is engaged in idiosyncratic, stereotyped behavior, such as hand weaving, rythmic object manipulation, head shaking, and mouthing objects.

3. Non-compliant: The resident refuses to perform a task which a staff member asks them to complete (e.g., refuses to take medication, refuses to give staff their token card, refuses to leave the area).

4. Other: The resident is not engaged in any of the above behaviors.

Token presentation. The three categories of token presentation were taken from the Broadlawns West ICF Token Economy Instruction Manual.

1. Appropriate token presentation: At the time of task completion on the ADL card either the correct amount of token points are initialed by staff according to the number of prompts needed for the behavior to be completed (e.g., 10 points for the independent completion of a skill, five points for requiring two prompts to complete the skill and two points for more than two prompts to complete the skill), correct points are given or fined according to individual management plans or by general token plans for each card level.

For the Social Skills card the definition is the same, however, upon task completion the resident may earn 20 or 50 points depending on prompting and level of social interaction (e.g., to earn 50 points on medication the resident asks in a normal tone of voice, says "please" and "thank you" when request is granted without prompting. Resident does not repeat the request once the staff member has acknowledged he/she heard it. Prompting of the behavior results in 20 points earned).

The Salaried card follows the same definitions, except no points are earned for the target tasks unless in their specific programs. Correct token charges for items are made the same as defined above.

2. Inappropriate token presentation: This occurs when token points are not given according to the definition of appropriate token presentation (e.g., giving the wrong amount of points based on prompting or behavior, points not given according to individual programs, does not give the token points when they were earned, gives token points when they have not been earned, is allowed to purchase an item without being charged, when they have no points or do not have their card for a purchase but are allowed to do so). Not included under this definition is at medication time when they do not have their token card or refuse to present it.

3. Token refusal: At the time of the target task the resident does not have their card, refuses to present it to staff, or in case of a purchase does not have enough points to complete the purchase and is not allowed to.

Observers

The experimenter served as the primary observer, with the building's resident service director (RSD) acting as the major reliability taker. Nursing staff were not informed of the experimental purpose and did not participate as observers.

Training for the observers included a first hand knowledge of the facility's policy and procedures, reading defini-

tions and examples, and question and answer periods with the experimenter. Practice periods outside of the actual study were provided with feedback from the experimenter. Perfect agreement with the experimenter on 10 consecutive observations of target behavior was obtained before reliability was taken.

Observations

Medication was given out for the majority of the residents who took medication at 7:30 A.M. and 11:30 A.M. for the morning shifts and 5:00 P.M. and 9:00 P.M. for the evening shift (averaging within one hour for each of these time periods). The facility was divided into north and south sides, with medication being given at these times on both sides. Observations were taken five out of seven days a week at 7:30, 11:30, and 5:00, utilizing a rotation system for which side of the facility was observed at each medication period. The 9:00 P.M. medication time was not looked at after preliminary observations due to the fact that no resident had their cards at that time because they were turned in for the night, leaving little evaluation of token usage possible at that time. A random choosing of which side to start on at each time for each observation day was completed at the beginning of each month. Observations were generally made Monday through Fridays. The observer(s) was seated in the nurses station or standing in an area where the nurse was located and visible/audible during the entire observation period. Observation periods were limited to a minimum of 15 minutes with a maximum of 30 minutes in length. If the medication period was interrupted for any reason, observations were resumed when

the nurse returned to pass the remaining medication if within a 15 minute period.

Reliability

Reliability checks were made independently and simultaneously by two observers on the same nurse. As previously stated the resident service director served as the reliability observer during the study. Reliability sessions were scheduled at the beginning of each month along with the regular observation schedule to help facilitate and assure availability of time to observe for the observers. At least one reliability session was scheduled on a weekly basis. The observation technique was the same as described under the observation section. Data sheets were scored independently and inter-observer agreement was calculated for each behavior and token category by dividing the number of agreements as to the occurrence of a behavior by the number of agreements plus disagreements on scoring. An agreement constituted both observers recording all of the same behaviors for each individual resident observed. Each scoring discrepancy between the two observers was counted as two disagreements.

Besides the recording instrument used for monitoring the medication periods (see appendix D) there was also permanent outcome data from the medication signature section of the token cards which was recorded by the staff. For medications the nurses were also required to record the type of medication given each resident, when, and sign their initials that it

was given in a medication file.

In-service training

During the treatment phase of this study all nurses on the observed work shifts were trained in principles of behavior modification as related to their job tasks. Although not a new concept to the facility, no formal training had been given to the majority of the staff in these principles at the facility. Training was completed in a mandatory one hour paid in-service training format for the staff, utilizing adopted material from the Boulder Training Model materials (Rimell, Stagg, Hanson, Zeeck, Moore, VanHaecke, & Longworthy, 1977), Special Education for Adolescents Issues and Perspectives (Phillips, Fixsen, Phillips, & Wolf, 1979), and specific information on token usage at the facility from the Broadlawns West ICF Token Economy Instruction Manual. Material covered included definitions of relevant behavioral terminology, advantages of using a token system, general purpose and use of the facility's specific token economy (especially related to nursing interactions, i.e., medication), resident-staff interactions during token presentation, and situational role-playing and discussion.

Procedure

Baseline. All staff members were told in a bi-weekly communication meeting prior to baseline that observations would be made at various times of day throughout several weeks for a study that would be going on at the facility to assess programming. Normal routines were observed during the base-

line phase with no feedback on performance levels given to the staff. A one week period of observation was used prior to taking baseline data to help eliminate any effects of having the observer present. Other aspects of the facility's programs were observed to help assess token usage over all and to help minimize any staff tension towards a focus in only one area such as with the nurses at medication time.

In-service training. At the end of baseline a memo was sent to all of the nurses on each of the two shifts assigning them to one of two in-service training sections for a mandatory in-service entitled "Token Economy Usage". The first section was for the four 3-11 shift nurses on one evening and then two days later the second section was held in the afternoon for the four nurses on the 7-3 shift. Due to scheduling difficulties the classes were held during the shifts the nurses were assigned to work, thus taking some of the nurses off the work floor for an hour to attend the class. The same information and format was utilized with both in-service classes, being presented each time by the resident service director. The resident service director was trained in behavioral technology, familiar with the in-service material through adding to its formulation, and his presentation of the material was believed to add more clout because of his role and status at the facility.

Experimental Design

A multiple baseline approach was used, where an analysis of across shift personnel were matched, and a multiple baseline

across the response classes of token usage and social interaction are developed as well.

Follow-up

Follow-up data was collected one week after the termination of the regular observations to help determine if there would be any behavior maintenance. Observation procedures remained the same during follow-up as in the study.

CHAPTER III

RESULTS

Social Interaction

Figure 1 shows the percent of appropriate social interactions between each of the eight observed nurses and the residents during medication presentation. Immediate increases in percent of appropriate interactions was observed for each nurse over their baseline measurements. During baseline a low rate of appropriate interaction between nurse and resident at medication presentation was observed by all nurses. Only two nurses had percentages above 25% during baseline, and then each only accomplished this once. Nurse A from the P.M. shift (3-11) had 44% appropriate interactions on one shift and nurse F reached 38% appropriate interactions on one of the A.M. shifts (7-3). One nurse from each of the two shifts maintained a 0% during all baseline observations (nurses C & H), with three nurses from the A.M. shift (nurses E,F,G) and one from the P.M. (nurse D) only reaching above the 0% mark on one baseline observation each. Nurses A and B (P.M. shift) had more varied baselines, each with four observations above 0%, and nurse A once reached the highest mark of 44% for all nurses as already noted.

The effects of in-service training were seen immediately by increases in appropriate social interactions by all nurses. The changes, although higher than baseline measurements in all

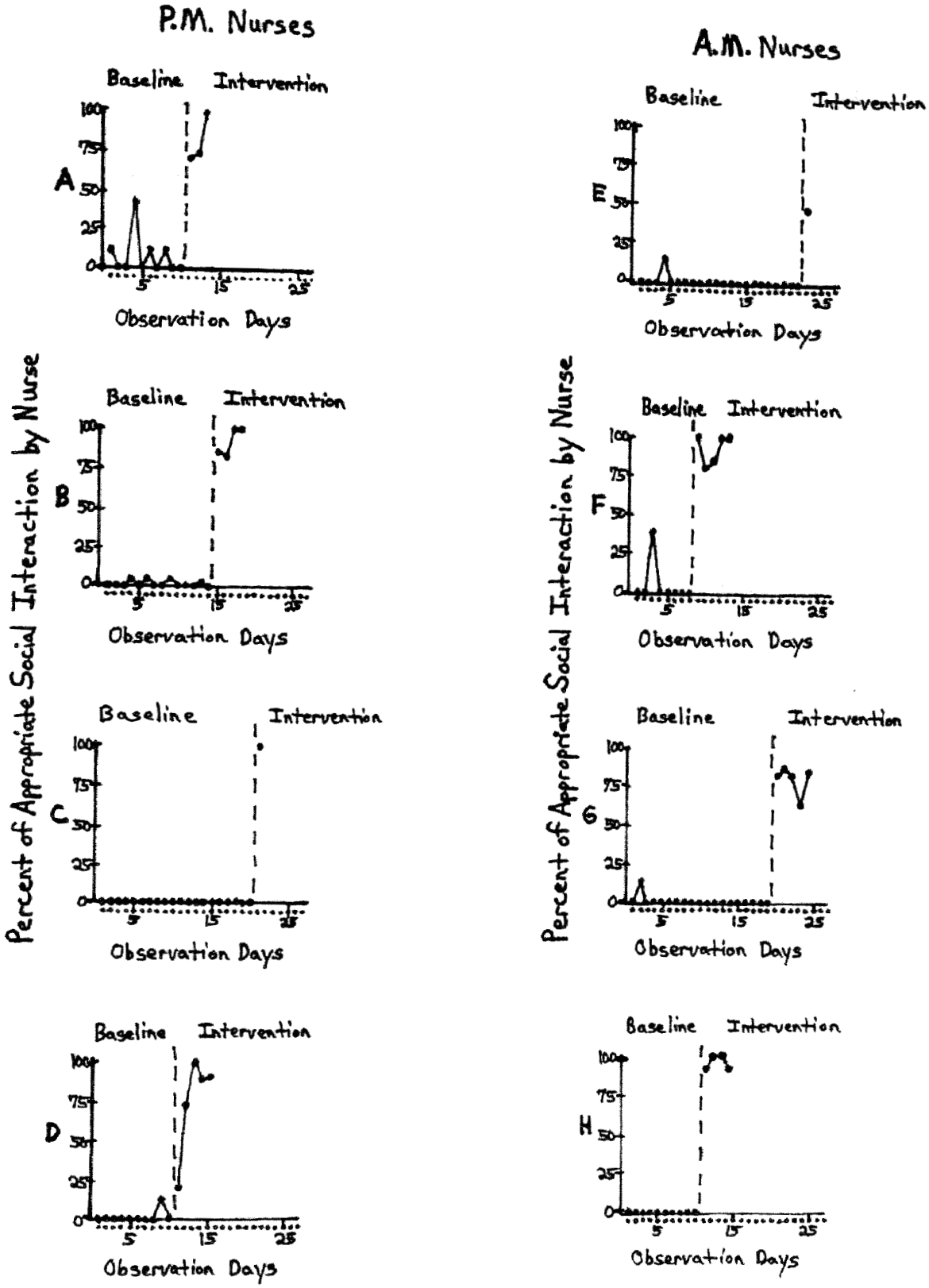

Figure 1 Percent of appropriate social interaction between each nurse and residents during medication passing across observation days and individual shifts.

cases right off, increased in a slow trend as can be noted in nurses A, B, D, and H. Nurses F and G began the intervention phase with large increases but at second and third observations deteriorated to substantially lower levels. This trend reversed itself and then again reached or surpassed the level of the first observation within one or two observations. Only one data point was obtained for nurses C and E so no trend analysis could be made during their intervention phases. The highest possible level of 100% appropriate presentations was reached at least once during intervention by six out of the eight nurses, with two reaching it twice (B & H), and one three times (F).

Table 1 breaks down the total number of correct presentations observed over the total number of presentations for each nurse and then gives a total percentage during the baseline and intervention phases. Also provided is an overall shift analysis allowing a comparison of across shift changes. For social interactions the highest total percent of correct interactions for any of the nurses during baseline was only 9% and went as low as 0%. During intervention the lowest increase of any nurse was to 45% correct and went as high as 100%. Overall, the P.M. shift averaged 2% correct social interactions during baseline compared to the A.M. shift's 1%, but the A.M. shift increased to 84% overall correct interactions and the P.M. shift to 78% correct after receiving the in-service training.

		SOCIAL INTERACTION				TOKEN PRESENTATION				
		Baseline		Intervention			Baseline		Intervention	
	Nurse	#Correct/Total#	%	#Correct/Total#	%	Nurse	#Correct/Total#	%	#Correct/Total#	%
P.M.	A	7/74	9	18/23	78	A	36/71	51	21/21	100
	B	4/191	2	27/30	90	B	91/188	48	27/27	100
	C	0/256	0	7/7	100	C	76/254	30	5/5	100
	D	1/101	9	38/55	69	D	39/100	39	46/47	98
	Totals =	12/622	2	90/115	78	Totals =	242/613	39	99/100	99
A.M.	E	2/243	8	5/11	45	E	82/251	33	3/4	75
	F	5/75	7	26/28	93	F	24/69	35	23/23	100
	G	3/299	1	50/62	81	G	147/246	60	51/51	100
	H	0/113	0	32/34	94	H	21/112	19	29/29	100
	Totals =	10/730	1	113/135	84	Totals =	274/678	40	106/107	99

Table 1 Percent of appropriate social interactions and token presentations for each nurse calculated from total number of correct presentations over the total number of observed presentations, listed by each nurse and shift group during baseline and intervention phases.

Token Presentation

Figure 2 presents the percent of tokens appropriately presented to residents by each nurse during medication dissemination. Higher rates of token presentation were obtained over baseline rates in seven out of eight nurses, with one nurse only matching their second highest baseline percentage (nurse E). Baseline data for appropriate token presentation was highly variable, ranging from 100% correctly presented on two occassions to 0% on nine occassions. The majority of data points for all nurses were below 75%, with nurse G having the highest average with six out of 19 observations above or at the 75% mark.

Intervention data yields six nurses who increased to the level of 100% correct presentations of tokens immediately and maintained that level, with one nurse (D) obtaining that level after the second observation and maintaining it. Only nurse E was below the 100% level at 75% correct with one observation only. One observation did not allow for a possible change in behavior with a second observation as in nurse D's instance.

Again, table 1 shows the total number of correct token presentations observed over the total number of presentations for each nurse and gives overall percentages for both experimental phases, as well as across shift data. The highest percentage of total token presentations in baseline was 60%, with 19% being the lowest. As shifts during baseline A.M. had 40%

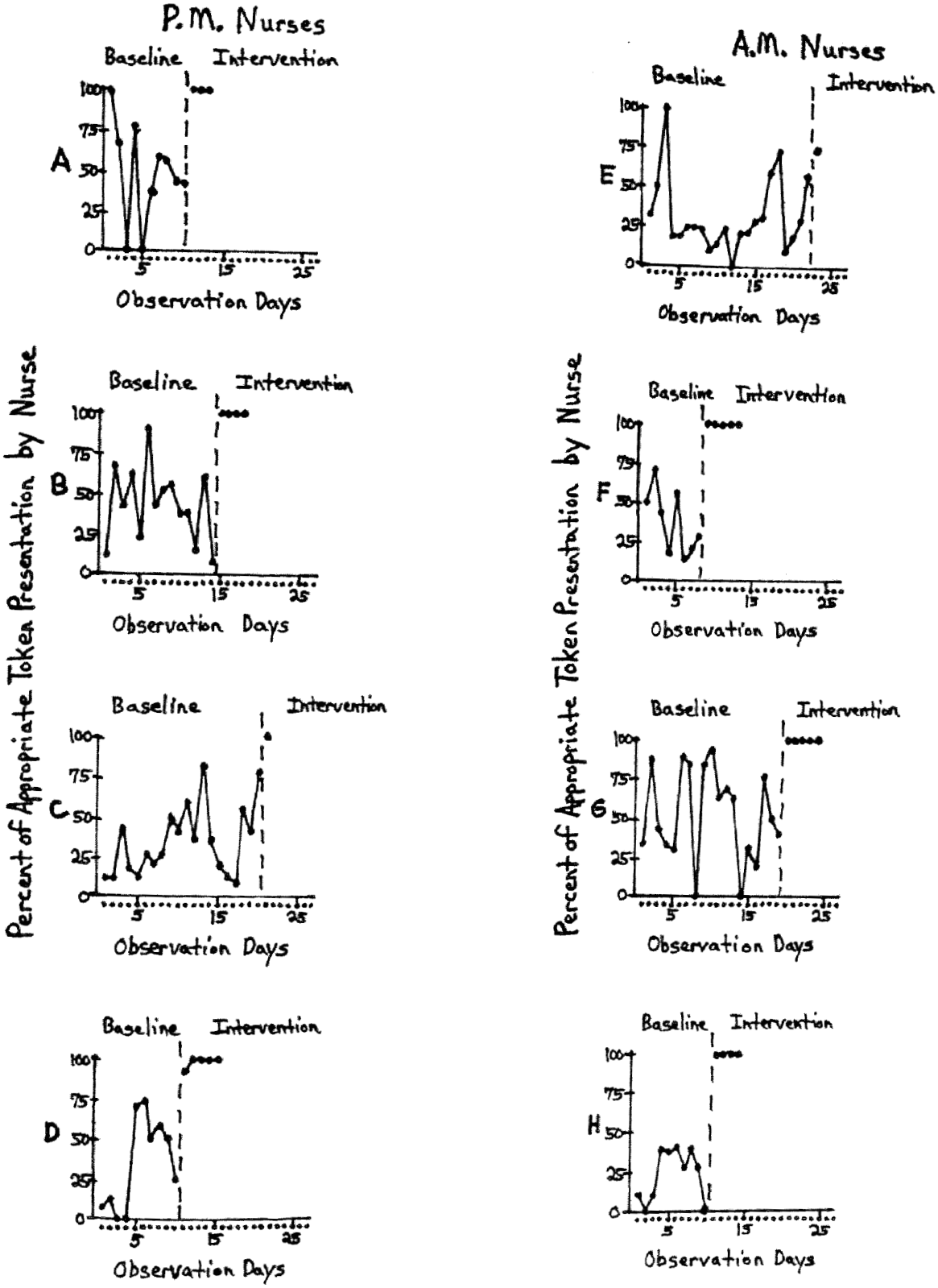

Figure 2 Percent of tokens appropriately presented to residents at medication time by nurse across observation days and individual shifts.

correct token presentations and the P.M. shift obtained 39% correct. Intervention yielded the highest individual total percentage at 100% and the lowest at 75%, with both the A.M. and P.M. shifts reaching 99% correct token presentations respectively.

Observation categories of resident behavior and observed small talk between nurse and resident at medication time produced no significant behavior change from baseline to intervention, appearing to have little effect on measurement outcomes and no effect on the study. Even though, when the residents did not have their token cards or refused to give it to the nurse to be signed they were not counted in the correct token presentation figures.

Reliability

Reliability was scheduled at the beginning of each month for at least once a week. There were three seperate observation categories observed and observer agreement was scored for each. Overall observer agreement for the study was 95%, with categories of resident behavior at 98%, social interaction at 96%, and token presentation with 91% agreement.

CHAPTER IV

DISCUSSION

The results demonstrated that in-service training concentrated at job related behavior change techniques could help to increase token presentations and appropriate social interactions in a specific setting. Significant increases in target behaviors were obtained in all individuals and groups, with the changes across shifts differing only slightly as group data.

Even though a short in-service training period of one hour was used, its concentrated format specifying specific techniques at particular behaviors and using modeling/role-playing to demonstrate such appears to be some of the key to its success. In-service training has been used to increase behavior successfully with staff as noted by Gardner (1972) and Panyan & Petterson (1974), and the addition of role-play/modeling helps add to the ward generalization as with Adams et al. (1980) in their role-play versus lecture study. An added factor for positive increases may have also been a new level of interaction between nurse and resident that was in itself rewarding. As Milby et al. (1975) pointed out in their study the interaction created by a token economy can be very rewarding for all involved if applied correctly and consistently. Although conversations between nurses and residents did not get longer or happen more often, the content of interactions in

general changed at medication time, allowing for "may I have", "please", and "thank you" to increase for all involved. Increases in positive social interactions coupled with consistant token reinforcement for residents appeared to have enriched the environment of the specific setting targeted, medication presentation.

It should be noted that some individual changes in the data are reflections of small numbers of observations (see Table 1). Medication was disseminated to the residents starting at a given time and ending within at least one hour after that time in most cases. The study's observation periods were from 15 to 30 minutes and thus at times only small groups were observed. Also, when more than two nurses were working only two passed medication, and many times nurses would not pass medication for several days. This resulted in varying baseline lengths for individual data as reflected in Figures 1 and 2. Some analysis corrections were made by using longer baselines and comparing group data to make up for varied information.

In-service training is an ongoing teaching approach used in the study facility which readily lent itself to training of specific behavioral techniques. This fact is true in most institutions of this type and thus training is already budgeted for on a yearly basis, with only minimal costs for materials needed in most cases. Outside observers might be utilized for programming checks, but arrangements with local

school systems might prove very cost effective and time involvement is also minimal per day for such observations.

The present study showed the successful use of in-service training to increase targeted behaviors for a short period of time. Follow-up data taken after a one week period of no data gathering showed a maintenance of behavior change to that point. Future data will need to be taken to substantiate the behavior change over a longer period of time. Baseline data gathered in other programming areas of the facility also suggested that a staff wide training program be developed to help increase token usage and appropriate social interaction throughout the facility. Possible maintenance and support/training procedures to be tried in the future as well as in-service training for such a facility setting are self-recording for the staff (Burg et al., 1979) and supervisor feedback to the staff (Montegar et al., 1977; Panyan et al., 1970; Quilitch, 1975).

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Appendix A

ADL token card

REQUESTS		Meds		APPRO. SOC SKILL ACTIVITIES		Physical Aggre.	
Meals		20	50	Polite		20	50
20	50	20	50	20	50	20	50
20	50	See Dr.s		20	50	20	50
20	50	20	50	20	50	Not Getting Request	
20	50	See Administrative Staff.		20	50	20	50
Break/Juice		20	50	Cooperative Participates		20	50
20	50	Petty Cash		20	50	20	50
20	50	20	50	20	50	20	50
20	50	Phone Calls		20	50	Waiting for Request	
20	50	20	50	20	50	20	50
Cigs		20	50	Happy Disposition		20	50
20	50	20	50	20	50	Discrepancy	
Token Store		20	50	20	50	20	50
20	50	20	50	20	50	20	50
Boutique		Extra W.T.		20	50	20	50
20	50	20	50	Interacts w/ Peers & Staff		20	50
7/11		20	50	20	50	GREETINGS	
20	50	20	50	20	50	20	50
Pass		20	50	20	50	20	50
20	50	Activities		20	50	20	50
Prn's		20	50	APPRO. DEAL W/ AVERSIVE SITUA.		20	50
20	50	20	50	Verbal Aggress.		20	50
20	50	20	50	20	50	20	50
20	50	20	50	20	50	20	50
20	50	Maintenance		20	50	20	50
20	50	20	50	20	50	20	50

Social Skills Card

PT
Track ___ Date
Resident

KEY- SOCIAL SKILLS
50 pts- Behaviour perfect in form and repetition, and is appropriate to situation
20 pts- Behaviour requires prompting to be perfect.

____	START SHIFT BANK
plus+ ____	END SHIFT EARNINGS
equals= ____	BALANCE
minus- ____	END SHIFT FINES
equals= ____	BALANCE
minus- ____	SPENDINGS
equals= ____	END BANK TOTAL (NOT LESS THAN ZERO)
____	NUMBER OF BEHAVIORS
____	NUMBER OF ITEMS

Spendings

Item	Points	Offense	Time	Points	T:

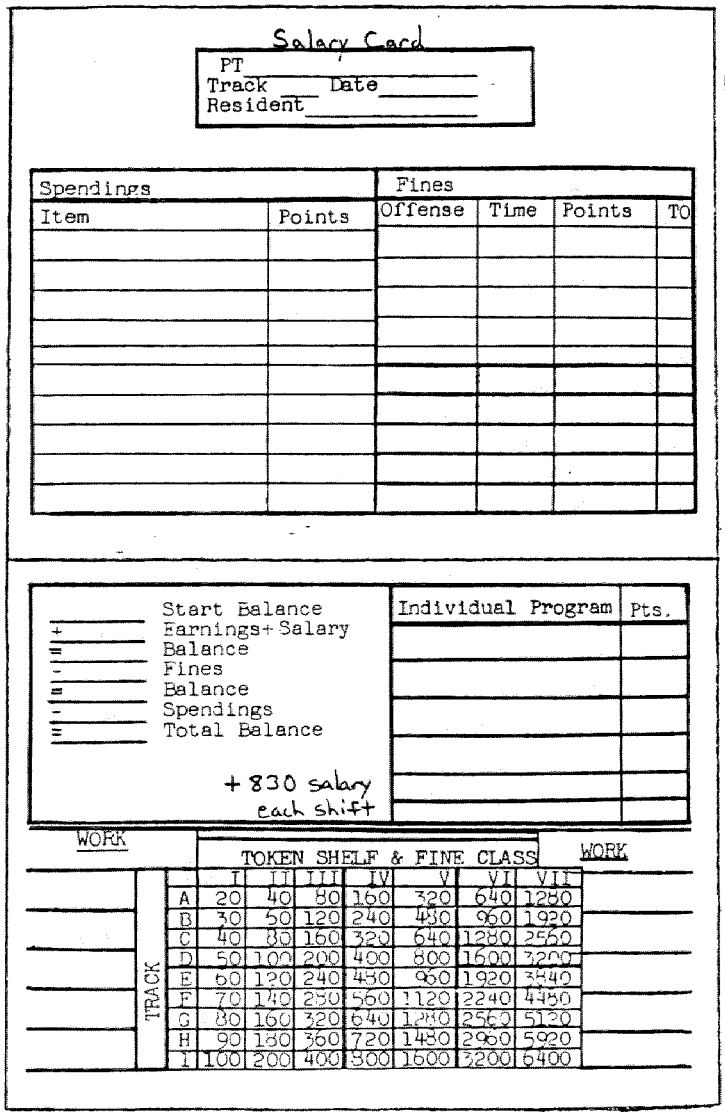
WORK	INDIVIDUAL PROGRAMS

TOKEN SHELF & FINE CLASS

TRACK	I	II	III	IV	V	VI	VII
A	30	40	80	160	320	640	1280
B	30	50	120	240	480	960	1920
C	40	80	160	320	640	1280	2560
D	50	100	200	400	800	1600	3200
E	60	120	240	480	960	1920	3840
F	70	140	280	560	1120	2240	4480
G	80	160	320	640	1280	2560	5120
H	90	180	360	720	1440	2880	5760
I	100	200	400	800	1600	3200	6400

Appendix C

Salaried token card



Salary Card

PT
Track ___ Date _____
Resident _____

Spendings		Fines			
Item	Points	Offense	Time	Points	TO

_____ Start Balance
+ _____ Earnings+Salary
= _____ Balance
- _____ Fines
= _____ Balance
- _____ Spendings
= _____ Total Balance

+830 salary each shift

Individual Program	Pts.

WORK

TOKEN SHELF & FINE CLASS

WORK

TRACK	I	II	III	IV	V	VI	VII
A	20	40	80	160	320	640	1280
B	30	50	120	240	480	960	1920
C	40	80	160	320	640	1280	2560
D	50	100	200	400	800	1600	3200
E	60	120	240	480	960	1920	3840
F	70	140	280	560	1120	2240	4480
G	80	160	320	640	1280	2560	5120
H	90	180	360	720	1480	2960	5920
I	100	200	400	800	1600	3200	6400

Appendix D

Medication observation sheet

Date: _____ Observation Sheet

Subject(s) 1) _____ 2) _____ 3) _____ (Side: _____

Shift: _____ Start/end times: _____ / _____

Observer: _____

Key:

Resident Behavior	Subject Behavior
1 Disruptive	1 Direct Interaction
2 Self stimulatory	2 Indirect Interaction
3 Non-compliant	3 Interaction with other
4 Other	4 Staff to staff
1A with small talk	A Appropriate token
1B without small talk	B Inappropriate token
	C Token refussal

Resident	Resident Behavior	S**	Subject Behavior	Comments
1.	1 2 3 4		A B 1 2 3 4 A B C	
2.	1 2 3 4		A B 1 2 3 4 A B C	
3.	1 2 3 4		A B 1 2 3 4 A B C	
4.	1 2 3 4		A B 1 2 3 4 A B C	
5.	1 2 3 4		A B 1 2 3 4 A B C	
6.	1 2 3 4		A B 1 2 3 4 A B C	
7.	1 2 3 4		A B 1 2 3 4 A B C	
8.	1 2 3 4		A B 1 2 3 4 A B C	
9.	1 2 3 4		A B 1 2 3 4 A B C	
10.	1 2 3 4		A B 1 2 3 4 A B C	
11.	1 2 3 4		A B 1 2 3 4 A B C	
12.	1 2 3 4		A B 1 2 3 4 A B C	
13.	1 2 3 4		A B 1 2 3 4 A B C	
14.	1 2 3 4		A B 1 2 3 4 A B C	
15.	1 2 3 4		A B 1 2 3 4 A B C	
16.	1 2 3 4		A B 1 2 3 4 A B C	
17.	1 2 3 4		A B 1 2 3 4 A B C	
18.	1 2 3 4		A B 1 2 3 4 A B C	
19.	1 2 3 4		A B 1 2 3 4 A B C	
20.	1 2 3 4		A B 1 2 3 4 A B C	
21.	1 2 3 4		A B 1 2 3 4 A B C	
22.	1 2 3 4		A B 1 2 3 4 A B C	
23.	1 2 3 4		A B 1 2 3 4 A B C	

THE EFFECTS OF IN-SERVICE TRAINING ON STAFF TOKEN SYSTEM USAGE

An abstract of a thesis by
Kim L. Ramsey
May 1985
Drake University
Advisor: Kenneth E. Lloyd

The problem. To assess the usefullness of a concentrated in-service training packet for staff. Focus was on the quality of token presentation and social interaction with residents of a residential psychiatric facility.

Procedures. A one hour in-service was presented using a multiple baseline design across eight nurses from two different shifts. The in-service presented training to help increase nurse's token presentation and appropriate social interaction with residents. Observations were conducted during medication times at one of two nurses stations each targeted shift.

Findings. Appropriate social interaction and token presentation from nurse to resident during medication presentation increased significantly for each nurse. Large increases across shifts were obtained also, having the A.M. shift increase from 1% to 84% appropriate social interactions and 40% to 99% correct token presentations, while the P.M. shift went from 2% to 78% and 39% to 99% respectively.

Conclusions. In-service training focussed on specific behavior change increased token presentations and appropriate social interactions in a given setting. A one week follow-up showed maintenance of the behavior change data obtained in the study.

Recommendations. Development of a facility wide staff training packet to help increase overall token usage and appropriate social interactions. Assessment of the reciprocal results could then be made.